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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,717	01/02/2001	Cecile Bebot	05725.0826-00	1012

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FINNEGAN, HENDERSON, FARABOW, GARRETT &  
DUNNER LLP  
1300 I STREET, NW  
WASHINGTON, DC 20006

EXAMINER

ELHILO, EISA B

ART UNIT PAPER NUMBER

1751

DATE MAILED: 11/21/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-12

**Office Action Summary**

Application No.

09/750,717

Applicant(s)

BEBOT ET AL.

Examiner

Eisa B Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1 This action is responsive to the amendment filed on August 30, 2002.

### **NEW GROUND OF REJECTION**

Upon further consideration of the rejections of record the prosecution is reopened.

Exparte action is resumed.

2 Claims 1-91 are pending in this application.

### ***Claim Objections***

Claims 1, 38, 55,58, 61, 64, 74, 77, 80, 83, 86 and 89 objected to because of the following informalities: The claims recite and number the formulae with the numbers (VI), (a) and (VIII). These numbers are not consecutive. The numbers should be either (I), (II) and (III) or (a), (b) and (c). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-39 and 41-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Mettrie et al. (US 5,976,195) in view of Grollier et al. (US 4,842,849).

De la Mettrie (US' 195) teaches hair dyeing compositions similar to the claimed compositions when the reference's compositions comprise quaternary polyammonium polymers which similar to the claimed formula (a) when in the claimed formula (a) R1, R2, R3 and R4 are chosen from alkyl group having one carbon atom (CH<sub>3</sub>), n = 3, p = 6 and X<sup>-</sup> is anion chosen

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from anion derived from inorganic acid such as  $\text{Cl}^-$  as claimed in claims 1-7 (see col. 7, formulae (V) and (VI)), from 0.0005 to 12% of oxidation bases such as para-phenylenediamine as claimed in claims 17-21, 24 and 29 (see col. 4, lines 9 and formula (II) and col. 6, lines 49-50), para-aminophenol having a formula (IV) which is similar to the claimed formula (III) when in the reference's formula R9 and R10 are hydrogen atoms as claimed in claims 26-27 (see col. 5, formula IV), from 0.005 to 5% of couplers such as meta-phenylenediamine as claimed in claims 30-31 (see col. 6, lines 55-56) and col. 7, line 10), heterocyclic bases such as pyrimidine, pyridine and pyrazole derivatives as claimed in claim 28 (see col. 6, lines 20-40), direct dyes as claimed in claim 33 (see col. 7, line 16), acid-addition salts such as sulphates, lactates and acetates as claimed in claim 32 (see col. 7, lines 12-13), double bases as claimed in claims 22-23 (see col. 5, formula (III)), reducing agents such as aqueous ammonia as claimed in claim 34 (see col. 8, line 42), oxidizing agents such as aqueous hydrogen peroxide as claimed in claim 39 and 41-42 (see col. 8, line 30-32) and surfactants such as anionic, cationic or nonionic as claimed in claim 50 (see col. 8, lines 5-6). De la Mettrie also teaches methods for dyeing hair which are similar to the claimed methods when the reference's methods comprise applying to the hair a dyeing composition as described above after mixing at the time of use with the oxidizing agent as stated above, leaving it to act for an exposure time ranging from 1 to 60 minutes, washing with shampoo and rinsing again and drying the hair as claimed in claims 55-63 and 74-79 (see col. 8, lines 62-67 and col. 9, lines 1-2). De la Mettrie further, teaches a kit for dyeing hair similar to the claimed kit when the reference's kit comprises at least two compartments device as claimed in claims 64-66 and 80-91 (see col. 12, claim 35).

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The instant claims differ from the reference by reciting hair dyeing compositions comprising dyeing ingredients in the claimed amounts such as quaternary polyammonium polymers of cyclohomopolymers, thickeners and fatty alcohols. De la Mittrie teaches a hair dyeing composition comprising an effective amount of other agents, previously known elsewhere in oxidation dyeing such as various common adjuvant such as conditioners (see col. 8, lines 1-7).

Grollier (US' 849) in analogous art teaches a hair dyeing composition comprising cyclic polymers having the formula (III) which is similar to the claimed formula (VI) when in the reference formula p and t are equal 0 to 1, and  $p + t = 1$ , R'' presents hydrogen or methyl group, R and R' are alkyl groups having 1 to 22 carbon atoms and y- is an anion (see col. 5, formula (III)) and poly- (quaternary ammonium) compound of the formula (IV) which similar to the claimed formula (VIII) when in the reference's formula A represents the group CH<sub>2</sub>- Y- CH<sub>2</sub> and Y represents -NH-C=O-NH- and B is CH<sub>2</sub>-Y-CH<sub>2</sub>- wherein Y is O and wherein the claimed formula (VIII) p is an integer 1 and D is a direct bond (see col. 27, formula IV), from 0.05 to 15% of thickeners such as stearate or distearate of polyethylene glycol cellulose derivatives as claimed 46-49 and 53-54 (see col. 13, lines 30-38) and fatty alcohols as claimed in claims 36-37 and 67-73 (see col. 13, lines 25-26).

Therefore, in view of the teaching of the secondary reference one having ordinary skill in the art at the time the invention was made would be motivated to modify the primary reference by adding the quaternary polyammonium polymers of cyclohomopolymers, thickeners and fatty alcohols as taught by Grollier (US' 849) because the primary reference teaches and suggests the use of these ingredients in the dyeing composition (see col. 7, lines 19-25) and, thus, a person of

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ordinary skill in the art would expect such a composition to have similar properties to those claimed, absent unexpected results.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over de la Mettrie et al. (US 5,976,195) in view of Grollier et al. (US 4,842,849) and further, in view of Samain (US 5,538,517).

The disclosures of de la Mittrie (US' 195) and Grollier (US' 849) are summarized above. De la Mittrie teaches a hair dyeing composition comprising oxidizing agents such as hydrogen peroxide (see col. 8, lines 30-31) and Grollier teaches a hair dyeing composition comprising oxidizing agents such as hydrogen peroxide (see col. 21, lines 28-29 and Example 19). But none of the combined references teach and disclose the use of enzymes as oxidizing agents.

Samain (US' 517) teaches in other analogous art a hair dyeing composition comprising oxidizing agents of 2-electron oxidoreductase enzymes such as uricase as claimed in claim 40 (see col. 3, line 32). Samain also, teaches as an alternative a hydrogen peroxide as an oxidizing agents that used in the hair dyeing composition as claimed in claim 41 (see col. 2, line 23).

Therefore, in view of the teaching of Samain, one having ordinary skill in the art would be motivated to modify the references of de la Mettrie and Grollier by incorporating the uricase enzyme that disclosed by Samain to make such a dyeing composition. Such modification would be obvious because Samain clearly teaches that enzymes as oxidizing agents are equivalents to hydrogen peroxide, and thus, a person of ordinary skill in the art would expect that use of uricase enzyme that provide for permanent coloration as taught by Samain would be useful and applicable to the hair dyeing compositions of de la Mettrie and grollier.

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***Response to Applicant's Arguments***

4 Applicant's arguments filed 8/30/2002 have been fully considered but they are rendered moot in view of new ground of rejection.

***Conclusion***

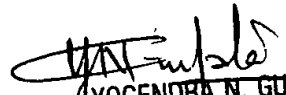
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (703) 305-0217. The examiner can normally be reached on M - F (7:30-5:00) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elhilo

November 18, 2002



YOGENDRA N. GUPTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700